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EXAMINER

NATNAEL, PAULO S M

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 02/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/712,539

Applicant(s)

HORLANDER, KARL FRANCIS

Examiner

Paulos M. Natnael

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bestler et al., U.S. Pat. No. 5,680,457.

Considering claim 1, Bestler et al. discloses the following claimed subject matter, note;

a) the claimed method of receiving said signal including video image information and conditional access information associated with one of a plurality of picture resolution formats is met by

Payload Crypto device 50, FIG.. 3.

b) the claimed method of decoding said conditional access information in the received signal is met by CA crypto device 68, FIG..3, which is used to decrypt further CA encrypted data bytes;

(col. 5, lines 23-31)

Except for;

c) the claimed adaptively selecting a picture resolution format in response to said decoded conditional access information;

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d) the claimed processing said video image information using said selected picture resolution format.

Regarding c) and d), Bestler doesn't specifically disclose selecting a picture resolution format in response to the decoded conditional access information and process the video image using the selected picture resolution format. However, Bestler discloses that "Depending on the desired resolution, recent advances in technology have made possible the transmission and reception of one or more digitally compressed television signals over a single 6 MHz television channel...In accordance with the MPEG standard, the compressed digital television information may be arranged for transmission in the form of a multiplexed transport stream of fixed length MPEG packets including, for example, video packets, audio packets and conditional access packets...." (Col. 1, lines 32-45) Bestler discloses a subscription decoder (FIG..1) in which is included a digital conditional access module (DCAM) 20. DCAM 20 operates according to the well known in the art MPEG standard using PID authorization packet, for example, as illustrated in FIG..4C.

Therefore, it would have been obvious to the skilled in the art at the time the invention was made to readily recognize that the system of Bestler is automatically selecting a picture resolution format appropriate for MPEG systems in response to the decoded conditional access information in the DCAM and processes the data accordingly.

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Considering claim 2, the claimed wherein selection of said picture resolution format is in response to said decoded conditional access information determining user entitlement to select one of said plurality of available picture resolution formats.

Regarding claim 2, see rejection of claim 1 (c) and (d).

Considering claim 3, the claimed wherein said picture resolution format is one of i) a standard definition format; and ii) a high definition format.

Regarding 3, Bestler doesn't specifically disclose a format (high or standard definition). However, Examiner takes Official Notice here in that such display formats (high definition or standard definition) are well known in the art and, therefore, would have been obvious to the skilled in the art at the time the invention was made to readily recognize the teachings of the prior art and modify the system of Bestler.

Considering claim 4, the claimed further comprising the step of **recording** said video image information in said selected picture resolution format on a recording medium.

Regarding 4), Bestler doesn't specifically disclose a recording format (high or standard definition). However, Examiner takes Official Notice here in that such recording formats (high definition or standard definition) are it is well known in the art that VCRs and other recording medium record video image information in either standard definition format or high definition format and, therefore, would have been obvious to the skilled in the art at the time the invention

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was made to readily recognize the teachings of the prior art and modify the system of Bestler to provide a recording medium.

Considering claim 5, the claimed method of further comprising the step of reproducing said recorded video image information in said selected picture resolution format on a display.

Regarding 4), Bestler doesn't specifically disclose the step of reproducing said recorded video image information in said selected picture resolution format on a display. However, Examiner takes Official Notice here in that reproducing the recorded video image information in a selected format on a display is well known in the art, and therefore, would have been obvious to the skilled in the art to readily recognize the teachings of the prior art and modify the system of Bestler.

Considering claim 6, the claimed wherein said video image information of said received signal is transmitted as a digital signal on a first channel.

Regarding claim 6), Bestler doesn't specifically disclose receiving ancillary data transmitted on a on a first channel for controlling processing of said video image data. doesn't specifically disclose transmitting on a first channel. However, the Examiner takes Official Notice here in that the claimed method of transmitting and/or recording a video signal on first channel and transmitting and/or recording the ancillary signal on a second channel such as the line rate (1H) and twice the horizontal line (2H) is well known in the art, and therefore would have been

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obvious to the skilled in the art to readily recognize the teaching of the prior art and modify the system of Bestler.

Considering claim 7, the claimed method of further comprising the step of receiving ancillary data transmitted on a second channel for controlling processing of said video image data.

Regrading claim 7), Bestler doesn't specifically disclose receiving ancillary data transmitted on a on a second channel for controlling processing of said video image data. doesn't specifically disclose transmitting on a first channel. However, the Examiner takes Official Notice here in that the claimed method of transmitting and/or recording a video signal on first channel and transmitting and/or recording the ancillary signal on a second channel such as the line rate (1H) and twice the horizontal line (2H) is well known in the art, and therefore would have been obvious to the skilled in the art to readily recognize the teaching of the prior art and modify the system of Bestler.

Considering claim 8, the claimed method of wherein said ancillary data is transmitted as an analog video signal.

Regarding claim 8, see rejection of claims 6 and 7.

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Bestler et al.**, U.S. Pat. No. 5,680,457 in view of **Nagashima et al.**, U.S. Pat. No. 6,275,988.

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Considering claim 9, Bestler discloses all claimed subject matter, except for, the claimed “wherein each of said plurality of picture resolution formats is associated with a respective billing rate and further comprising the step of billing a user at the billing rate associated with a selected one of said plurality of picture resolution formats”;

Regarding claim 9, Bestler doesn’t specifically disclose the billing method or billing rate. However, Bestler discloses that the basic object of the invention to provide an improved conditional access system for a **subscription** service such as a **pay** cable television system. Nagashima et al., discloses an image transmission apparatus for processing hierarchically encoded image information includes an accounting unit for performing accounting processing in correspondence with the resolution of the image information. (See abstract) Specifically, Nagashima discloses common key cipher processing unit 113 to decipher common key coded at the transmitter, and quality information collection unit 108 that stores the requested quality (col. 36, lines 7-27)

Therefore, it would have been obvious for those skilled in the art at the time the invention was made to readily recognize the teaching of Nagashima that including an accounting unit for performing accounting processing in correspondence with the resolution and modify the system of Bestler to provide an accounting or billing the user at the billing rate associated with a selected one of the plurality of picture resolution formats.

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4. Claims **10-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kanota et al.**, U.S. Pat. No. 5,991,500.

Considering claim **10**, Kanota discloses the following claimed subject matter, note;

a) the claimed method of receiving said signal including video image information and copy protection information associated with one of a plurality of display formats is met by input to reproducing signal processor 23, FIG..23, which is assumed to include a copy protection information.” (Col.11, lines 62-64)

b) the claimed decoding said copy protection information in the received signal is met by reproducing signal processor 23, FIG..23. (See col. 12, lines 5-9)

➔ Except for;

c) the claimed adaptively selecting a format for displaying said video image information on a display in response to said decoded copy protection information; 27/26

d) the claimed processing said video image information using said selected display format. 28/26

Regarding c), and d), Kanota et al. discloses that “depending upon the format of the video signal (e.g. NTSC, PAL, HD, etc.), the particular line intervals in which S_{sub_1} and S_{sub_2} are superposed may vary. Nevertheless, such line intervals are predetermined and the presence therein of the copyright information and/or copy

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generation signals may be readily detected by copy protection detector 14.” (Col. 9, lines 63-67 through coll. 10, lines 2)

Therefore, it would have been obvious to the skilled in the art at the time the invention was made to readily recognize that Kanota automatically selecting a format appropriate for the particular display in response to the decoded copy protection information.

Considering claim 11, the claimed wherein selection of said display format is in response to said decoded copy protection information determining user entitlement to select one of said plurality of available display formats.

Regarding claim 11, see rejection of claim 10 © and (d).

Considering claim 12, the claimed wherein said display format is one of: i)a standard definition format; and ii)a high definition format.

Regarding claim 12, see rejection of claim 3.

Considering claim 13, the claimed further comprising the step of recording said video image information in a format determined by said decoded copy protection information on a recording medium.

Regarding claim 13, see rejection of claim 4.

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Considering claim 14, the claimed further comprising the step of reproducing said recorded video image information in said format determined by said decoded copy protection information on a display.

Regarding claim 14, see rejection of claim 5.

Considering claim 15, the claimed wherein said video image information of said received signal is transmitted as a digital signal on a first channel.

Regarding claim 15, see rejection of claim 6.

Considering claim 16, further comprising the step of receiving ancillary data transmitted on a second channel for controlling processing of said video image data.

Regarding claim 16, see rejection of claim 7.

Considering claim 17. The method of claim 16, wherein said ancillary data is transmitted as an analog video signal.

Regarding claim 17, see rejection of claim 8.

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5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kanota** et al., U.S. Pat. No. 5,991,500. in view of **Shah-Nazaroff** et al., U.S. Pat. No. 6,157,377.

Considering claim 18, Kanota discloses all claimed subject matter, except for, the claimed “wherein each of said plurality of picture resolution formats is associated with a respective billing rate and further comprising the step of billing a user at the billing rate associated with a selected one of said plurality of picture resolution formats”;

Regarding claim 18, Kanota doesn't specifically disclose “herein each of said plurality of picture resolution formats is associated with a respective billing rate and further comprising the step of billing a user at the billing g rate associated with a selected one of said plurality of picture resolution formats”; However, Kanota discloses methods of preventing video signals from being copied illegally or without charging a fee. Shah-Nazaroff et al. ^ddisclose conditional access and descrambling that can be done at ~~the~~ both the broadcast center or the client system. Shah-Nazaroff also discloses that “if a viewer buys an upgraded media feature to be able to record a digital broadcast signal ...an additional part of the signal can be descrambled to make the broadcast recordable. (Col. 4, lines 43-60) Further, Shah-Nazaroff discloses that “a viewer at client system 110 who has order a pay-per-view movie can pay an additional fee to receive the movie at a higher video resolution” (col. 2, lines 21-24)

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Therefore, it would have been obvious to the skilled in the art at the time the invention was made to readily recognize the teaching of the prior art and modify the system of Kanota to provide a plurality of picture resolution formats associated with a respective billing rate and of billing a user at the billing rate associated with a selected one of said plurality of picture resolution formats.

6. Claims **19-23,26, 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Knudson** et al., U.S. Pat. No. **6,141,488** in view of **Oguro** U.S. Pat. No. **5,907,656**.

Considering claim **19**, Knudson discloses the following claimed subject matter, note;

a) receiving said signal including video image information and copy protection information associated with one of a plurality of recording formats is met by tuner communications, and display circuitry 38, FIG..1, which “contains circuitry for selecting a desired television channel from among the television signals provide to set-top box 34 via communications path 30...” and “may have the capability to handle copy-protected programs, so that, for example, circuitry 38 may remove copy protection from a given program.” (Col.5, lines 310-54)

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b) decoding said copy protection information in the received signal is met by tuner communications, and display circuitry 38, FIG..1, which “contains communications circuitry for extracting program data from video and data signals provided to set-top box 34.”

Except for;

- c) adaptively selecting a format for recording said video image information on a recording medium in response to said decoded copy protection information; and
- d) processing said video image information using said selected recording format.

Regarding c) and d), Knudson discloses interactive program guides that allow users to access television program listings in different display formats. Knudson doesn't specifically disclose a format for recording. However, different types of recording formats are well known in the art. Oguro discloses that “a signal format and reproducing apparatus compatible with that format protect the copyright of recorded video and audio data against digital and analog dubbing.” (See Abstract). Further, Oguro discloses that “it is an object of the present invention to provide a signal format for a recording medium adapted to protect the copyright to video and audio signals that are recorded on that recording medium.

Therefore, it would have been obvious to the skilled in the art at the time the invention was to readily recognize the teachings of the prior and provide a format for recording to

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modify the system of Knudson and process the video information using the selected recording format.

Considering claim **20**, the claimed wherein selection of said recording format is in response to said decoded copy protection information determining user entitlement to select one of said plurality of available recording formats.

Regarding claim 20, see rejection of 19(c) and (d).

Considering claim **21**, the claimed wherein said recording format is one of: I)a standard definition format; and ii) a high definition format.

Regarding claim 21, see rejection of 19(c) and (d).

Considering claim **22**, the claimed further comprising the step of recording said processed video image information in said selected recording format on a recording medium.

Regarding claim 22, see rejection of claim 19(c) and (d).

Considering claim **23**, the claimed further comprising the step of reproducing said recorded video image information in said selected recording format on a display is met by television 44, FIG..1;

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Considering claim 26, the claimed wherein said video image information of said received signal is transmitted as a digital signal on a first channel.

Regarding claim 26, Knudson doesn't specifically disclose transmitting on a first channel. However, the Examiner takes Official Notice here in that the claimed method of transmitting and/or recording a video signal on first channel and transmitting and/or recording the ancillary signal on a second channel such as the line rate (1H) and twice the horizontal line (2H) is well known in the art, and therefore would have been obvious to the skilled in the art to readily recognize the teaching of the prior art and modify the system of Knudson.

Considering claim 27, the claimed further comprising the step of receiving ancillary data transmitted on a second channel for controlling processing of said video image data.

Regarding claim 27, see rejection of claim 26.

Considering claim 28, the claimed wherein said ancillary data is transmitted as an analog video signal.

Regarding claim 28, see rejection of claims 8.

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7. Claims **24-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Knudson et al.**, U.S. Pat. No. **6,141,488** in view of **Tsukamoto et al.** U.S. Pat. No. **5,796,828**.

Considering claim 24, Knudson discloses all claimed subject matter, except for;
The claimed wherein the copy protection information further includes information indicating a time period during which said processed video image information is able to be reproduced.

Regrading claim 24, Knudson doesn't specifically disclose indicating a time period during which said processed video image information is able to be reproduced.
However, this method is well known in the art. Tsukamoto et al. discloses a controlled-access broadcast signal receiving system. "Depending on the particular conditions and circumstances, a user can be prevented entirely from accessing the selected digital video signals, given limited access to the signals, or given full access to the signals." (Col.5, lines 27-32) Further, "One access-control signal indicates that the video programming is to be erased on a certain date Y (Erase on Data Y) and the other access-control signal the No REPRO signal. Access controller 28A stores the ERASE ON DATA Y signal and the NO REPRO signal in access condition memory 29. Encipherer 22, when enabled, supplies encrypted video signals to recording/reproducing section 23A for recording on storage 40.

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Therefore would have been obvious to the skilled in the art to readily recognize the teaching of the prior art and provide the reproduction inhibiting or permitting operations and modify the system of Knudson.

Considering claim 25, the claimed wherein said time period is set in response to said decoded copy protection information determining user entitlement to select one of said plurality of available recording formats.

Regarding claim 20, see rejection of 19(c) and (d).

8. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Knudson et al.**, U.S. Pat. No. **6,141,488** in view of **Shah-Nazaroff et al.**, U.S. Pat. No. **6,157,377**.

Considering claim 29, **Knudson** discloses all claimed subject matter, except for, the claimed “wherein each of said plurality of picture resolution formats is associated with a respective billing rate and further comprising the step of billing a user at the billing rate associated with a selected one of said plurality of picture resolution formats”;

Regarding claim 29, Knudson discloses that “Various menus and program listings screens are generated to provide ...handling the purchase of pay programming, informing the viewer of copy protection...” (col. 6, lines 23-28) further, Knudson discloses authorization for the descrambling of scrambled pay programs and circuitry 38 that is

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capable to handle copy-protected programs. (Col. 5, lines 47-54) Shah-Nazaroff also discloses that “if a viewer buys an upgraded media feature to be able to record a digital broadcast signal ...an additional part of the signal can be descrambled to make the broadcast recordable. (Col. 4, lines 43-60) Further, Shah-Nazaroff discloses that “a viewer at client system 110 who has order a pay-per-view movie can pay an additional fee to receive the movie at a higher video resolution” (col. 2, lines 21-24)

Therefore, it would have been obvious to the skilled in the art at the time the invention was made to readily recognize the teaching of the prior art and modify the system of Knudson to provide a plurality of picture resolution formats associated with a respective billing rate and of billing a user at the billing rate associated with a selected one of said plurality of picture resolution formats.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Oguro et al., U.S. Pat. No. 6,301,430 discloses Copy protecting television broadcast program signals which are received and recorded in a format that reserves recording areas for accessory information relating to the format..

b) Birch et al., U.S. Pat. No. 5,493,339 discloses a system for transmitting image and associated ancillary data.

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c) Elam, U.S. Pat. No. 6,104,423 discloses providing conditional access to received television programs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Paulos Natnael** whose telephone number is **(703) 305-0019**. The examiner can normally be reached on **Monday through Thursday** from **8:00 a. M. to 5:00 p.m.** The examiner can also be reached on alternate **Fridays**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John Miller**, can be reached on **(703) 305-4795**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is **(703) 305-3900**.

Any response to this action should be mailed to:

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or faxed to:

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(703) 872-9314, (for formal communications intended for entry)


or:

(703)872-9314 (for informal or draft communications, please label "PROPOSED" OR "DRAFT").

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, V.A. Sixth Floor (Receptionist).

Paulos M. Natnael

January 30, 2002



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